EXHIBIT B

CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER: 21-081

FINAL PRINTED LABELING

Draft

Prescribing Information as of April 2000

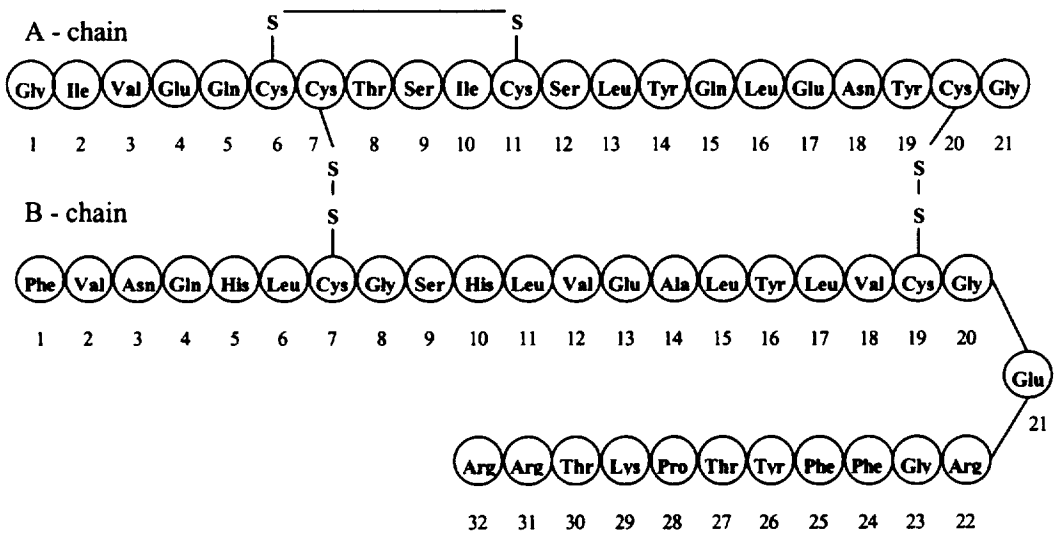
LANTUS®

(insulin glargine [rDNA origin] injection)

LANTUS® must not be diluted or mixed with any other insulin or solution.

DESCRIPTION

LANTUS® (insulin glargine [rDNA origin] injection) is a sterile solution of insulin glargine for use as an injection. Insulin glargine is a recombinant human insulin analog that is a long-acting (up to 24-hour duration of action), parenteral blood-glucose-lowering agent (see CLINICAL PHARMACOLOGY). LANTUS is produced by recombinant DNA technology utilizing a non-pathogenic laboratory strain of *Escherichia coli* (K12) as the production organism. Insulin glargine differs from human insulin in that the amino acid asparagine at position A21 is replaced by glycine and two arginines are added to the C-terminus of the B-chain. Chemically, it is 21^{A}-Gly-30^{B}a-L-Arg-30^{B}b-L-Arg-human insulin and has the empirical formula $C_{267}H_{404}N_{72}O_{78}S_6$ and a molecular weight of 6063. It has the following structural formula:



LANTUS consists of insulin glargine dissolved in a clear aqueous fluid. Each milliliter of LANTUS (insulin glargine injection) contains 100 IU (3.6378 mg) insulin glargine, 30 mcg zinc, 2.7 mg m-cresol, 20 mg glycerol 85%, and water for injection. The pH is adjusted by addition of aqueous solutions of hydrochloric acid and sodium hydroxide. LANTUS has a pH of approximately 4.

CLINICAL PHARMACOLOGY

Mechanism of Action

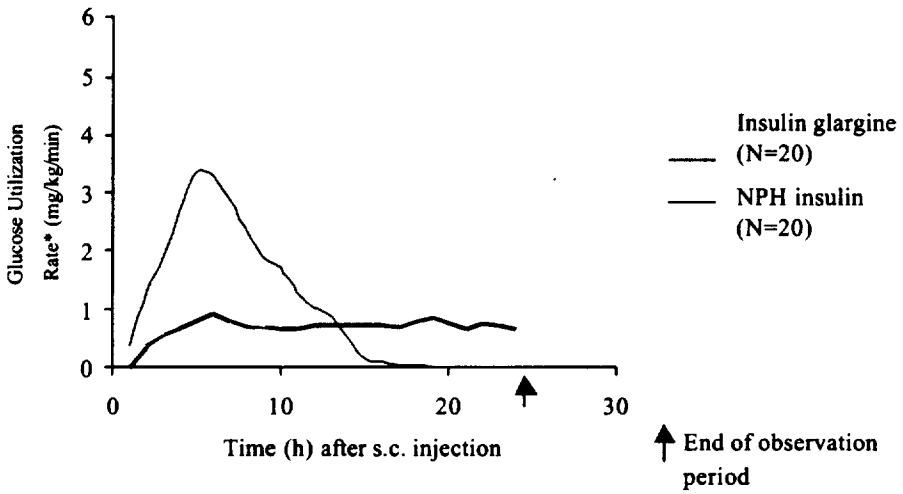
The primary activity of insulin, including insulin glargine, is regulation of glucose metabolism. Insulin and its analogs lower blood glucose levels by stimulating peripheral glucose uptake, especially by skeletal muscle and fat, and by inhibiting hepatic glucose production. Insulin inhibits lipolysis in the adipocyte, inhibits proteolysis, and enhances protein synthesis.

Pharmacodynamics

Insulin glargine is a human insulin analog that has been designed to have low aqueous solubility at neutral pH. At pH 4, as in the LANTUS injection solution, it is completely soluble. After injection into the subcutaneous tissue, the acidic solution is neutralized, leading to formation of microprecipitates from which small amounts of insulin glargine are slowly released, resulting in a relatively constant concentration/time profile over 24 hours with no pronounced peak. This profile allows once-daily dosing as a patient's basal insulin.

In clinical studies, the glucose-lowering effect on a molar basis (i.e., when given at the same doses) of intravenous insulin glargine is approximately the same as human insulin. In euglycemic clamp studies in healthy subjects or in patients with type 1 diabetes, the onset of action of subcutaneous insulin glargine was slower than NPH human insulin. The effect profile of insulin glargine was relatively constant with no pronounced peak and the duration of its effect was prolonged compared to NPH human insulin. *Figure 1* shows results from a study in patients with type 1 diabetes conducted for a maximum of 24 hours after the injection. The median time between injection and the end of pharmacological effect was 14.5 hours (range: 9.5 to 19.3 hours) for NPH human insulin, and 24 hours (range: 10.8 to >24.0 hours) (24 hours was the end of the observation period) for insulin glargine.

Figure 1. Activity Profile in Patients with Type 1 Diabetes†



*Determined as amount of glucose infused to maintain constant plasma glucose levels (hourly mean values); indicative of insulin activity.

†Between-patient variability (CV, coefficient of variation); insulin glargine, 84% and NPH, 78%.

The longer duration of action (up to 24 hours) of LANTUS is directly related to its slower rate of absorption and supports once-daily subcutaneous administration. The time course of action of insulins, including LANTUS, may vary between individuals and/or within the same individual.

Pharmacokinetics

Absorption and Bioavailability. After subcutaneous injection of insulin glargine in healthy subjects and in patients with diabetes, the insulin serum concentrations indicated a slower, more prolonged absorption and a relatively constant concentration/time profile over 24 hours with no pronounced peak in comparison to NPH human insulin. Serum insulin concentrations were thus consistent with the time profile of the pharmacodynamic activity of insulin glargine.

After subcutaneous injection of 0.3 IU/kg insulin glargine in patients with type 1 diabetes, a relatively constant concentration/time profile has been demonstrated. The duration of action after abdominal, deltoid, or thigh subcutaneous administration was similar.

Metabolism. A metabolism study in humans indicates that insulin glargine is partly metabolized at the carboxyl terminus of the B chain in the subcutaneous depot to form two active metabolites with in vitro activity similar to that of insulin, M1 (21^{A}-Gly-insulin) and M2 (21^{A}-Gly-des-30^{B}-Thr-insulin). Unchanged drug and these degradation products are also present in the circulation.

Special populations

Age, Race, and Gender. Information on the effect of age, race, and gender on the pharmacokinetics of LANTUS is not available. However, in controlled clinical trials in adults (n=3890) and a controlled clinical trial in pediatric patients (n=349), subgroup analyses based on age, race, and gender did not show differences in safety and efficacy between insulin glargine and NPH human insulin.

Smoking. The effect of smoking on the pharmacokinetics/pharmacodynamics of LANTUS has not been studied.

Pregnancy. The effect of pregnancy on the pharmacokinetics and pharmacodynamics of LANTUS has not been studied (see PRECAUTIONS, Pregnancy).

Obesity. In controlled clinical trials, which included patients with Body Mass Index (BMI) up to and including 49.6 kg/m^2, subgroup analyses based on BMI did not show any differences in safety and efficacy between insulin glargine and NPH human insulin.

Renal impairment. The effect of renal impairment on the pharmacokinetics of LANTUS has not been studied. However, some studies with human insulin have shown increased circulating levels of insulin in patients with renal failure. Careful glucose monitoring and dose adjustments of insulin, including LANTUS, may be necessary in patients with renal dysfunction (see PRECAUTIONS, Renal Impairment).

Hepatic impairment. The effect of hepatic impairment on the pharmacokinetics of LANTUS has not been studied. However, some studies with human insulin have shown increased circulating levels of insulin in patients with liver failure. Careful glucose monitoring and dose adjustments of insulin, including LANTUS, may be necessary in patients with hepatic dysfunction (see PRECAUTIONS, Hepatic Impairment).

CLINICAL STUDIES

The safety and effectiveness of insulin glargine given once-daily at bedtime was compared to that of once-daily and twice-daily NPH human insulin in open-label, randomized, active-control, parallel studies of 2327 adult patients and 349 pediatric patients with type 1 diabetes mellitus and 1563 adult patients with type 2 diabetes mellitus (see Tables 1-3). In general, LANTUS achieved a level of glycemic control similar to NPH human insulin as measured by glycated hemoglobin (GHb). The overall rate of hypoglycemia did not differ between patients with diabetes treated with LANTUS compared with NPH human insulin.

Type 1 diabetes - adult (see Table 1). In two large, randomized, controlled clinical studies (Studies A and B), patients with type 1 diabetes (Study A; n=585, Study B; n=534) were randomized to basal-bolus treatment with LANTUS once daily or to NPH human insulin once or twice daily and treated for 28 weeks. Regular human insulin was administered before each meal. LANTUS was administered at bedtime. NPH human insulin was administered once daily at bedtime or in the morning and at bedtime when used twice daily. In one large, randomized, controlled clinical study (Study C), patients with type 1 diabetes (n=619) were treated for 16 weeks with a basal-bolus insulin regimen where insulin lispro was used before each meal. LANTUS was administered once daily at

bedtime and NPH human insulin was administered once or twice daily. In these studies, LANTUS and NPH human insulin had a similar effect on glycohemoglobin with a similar overall rate of hypoglycemia.

Table 1: Type 1 diabetes mellitus — Adult

Treatment duration	Study A 28 weeks		Study B 28 weeks		Study C 16 weeks	
Treatment in combination with	Regular insulin		Regular insulin		Insulin lispro	
	LANTUS	NPH	LANTUS	NPH	LANTUS	NPH
Number of subjects treated	292	293	264	270	310	309
GHb						
Endstudy mean	8.13	8.07	7.55	7.49	7.53	7.60
Adj. mean change from baseline	+0.21	+0.10	-0.16	-0.21	-0.07	-0.08
LANTUS – NPH	+0.11		+0.05		+0.01	
95% CI for Treatment difference	(-0.03; +0.24)		(-0.08; +0.19)		(-0.11; +0.13)	
Basal insulin dose						
Endstudy mean	19.2	22.8	24.8	31.3	23.9	29.2
Mean change from baseline	-1.7	-0.3	-4.1	+1.8	-4.5	+0.9
Total insulin dose						
Endstudy mean	46.7	51.7	50.3	54.8	47.4	50.7
Mean change from baseline	-1.1	-0.1	+0.3	+3.7	-2.9	+0.3
Fasting blood glucose (mg/dL)						
Endstudy mean	146.3	150.8	147.8	154.4	144.4	161.3
Adj. mean change from baseline	-21.1	-16.0	-20.2	-16.9	-29.3	-11.9

Type 1 diabetes – pediatric (see Table 2). In a randomized, controlled clinical study (Study D), pediatric patients (age range 6 to 15 years) with type 1 diabetes (n=349) were treated for 28 weeks with a basal-bolus insulin regimen where regular human insulin was used before each meal. LANTUS was administered once daily at bedtime and NPH human insulin was administered once or twice daily. Similar effects on glycohemoglobin and the incidence of hypoglycemia were observed in both treatment groups.

Table 2: Type 1 diabetes mellitus — Pediatric

Treatment duration	Study D 28 weeks	
Treatment in combination with	Regular insulin	
	LANTUS	NPH
Number of subjects treated	174	175
GHb		
Endstudy mean	8.91	9.18
Adj. mean change from baseline	+0.28	+0.27
LANTUS – NPH	+0.01	
95% CI for Treatment difference	(-0.24; +0.26)	
Basal insulin dose		
Endstudy mean	18.2	21.1
Mean change from baseline	-1.3	+2.4
Total insulin dose		
Endstudy mean	45.0	46.0
Mean change from baseline	+1.9	+3.4
Fasting blood glucose (mg/dL)		
Endstudy mean	171.9	182.7
Adj. mean change from baseline	-23.2	-12.2

Type 2 diabetes - adult (see Table 3). In a large, randomized, controlled clinical study (Study E) (n=570), LANTUS was evaluated for 52 weeks as part of a regimen of combination therapy with insulin and oral antidiabetic agents (a sulfonylurea, metformin, acarbose, or combinations of these drugs). LANTUS administered once daily at bedtime was as effective as NPH human insulin administered once daily at bedtime in reducing glycohemoglobin and fasting glucose. There was a low rate of hypoglycemia that was similar in LANTUS and NPH human insulin treated patients. In a large, randomized, controlled clinical study (Study F), in patients with type 2 diabetes not using oral antidiabetic agents (n=518), a basal-bolus regimen of LANTUS once daily at bedtime or NPH human insulin administered once or twice daily was evaluated for 28 weeks. Regular human insulin was used before meals as needed. LANTUS had similar effectiveness as either once- or twice-daily NPH human insulin in reducing glycohemoglobin and fasting glucose with a similar incidence of hypoglycemia.

Table 3: Type 2 diabetes mellitus — Adult

Treatment duration	Study E 52 weeks		Study F 28 weeks	
Treatment in combination with	Oral agents		Regular insulin	
	LANTUS	NPH	LANTUS	NPH
Number of subjects treated	289	281	259	259
GHb				
Endstudy mean	8.51	8.47	8.14	7.96
Adj. mean change from baseline	-0.46	-0.38	-0.41	-0.59
LANTUS – NPH	-0.08		+0.17	
95% CI for Treatment difference	(-0.28; +0.12)		(-0.00; +0.35)	
Basal insulin dose				
Endstudy mean	25.9	23.6	42.9	52.5
Mean change from baseline	+11.5	+9.0	-1.2	+7.0
Total insulin dose				
Endstudy mean	25.9	23.6	74.3	80.0
Mean change from baseline	+11.5	+9.0	+10.0	+13.1
Fasting blood glucose (mg/dL)				
Endstudy mean	126.9	129.4	141.5	144.5
Adj. mean change from baseline	-49.0	-46.3	-23.8	-21.6

INDICATIONS AND USAGE

LANTUS is indicated for once-daily subcutaneous administration at bedtime in the treatment of adult and pediatric patients with type 1 diabetes mellitus or adult patients with type 2 diabetes mellitus who require basal (long-acting) insulin for the control of hyperglycemia.

CONTRAINDICATIONS

LANTUS is contraindicated in patients hypersensitive to insulin glargine or the excipients.

WARNINGS

Hypoglycemia is the most common adverse effect of insulin, including LANTUS. As with all insulins, the timing of hypoglycemia may differ among various insulin formulations. Glucose monitoring is recommended for all patients with diabetes.

Any change of insulin should be made cautiously and only under medical supervision. Changes in insulin strength, manufacturer, type (e.g., regular, NPH, or insulin analogs), species (animal, human), or method of manufacture (recombinant DNA versus animal-source insulin) may result in the need for a change in dosage. Concomitant oral antidiabetic treatment may need to be adjusted.

PRECAUTIONS

General

LANTUS is not intended for intravenous administration. The prolonged duration of activity of insulin glargine is dependent on injection into subcutaneous tissue. Intravenous administration of the usual subcutaneous dose could result in severe hypoglycemia.

LANTUS must not be diluted or mixed with any other insulin or solution. If LANTUS is diluted or mixed, the solution may become cloudy, and the pharmacokinetic/pharmacodynamic profile (e.g., onset of action, time to peak effect) of LANTUS and/or the mixed insulin may be altered in an unpredictable manner. When LANTUS and regular human insulin were mixed immediately before injection in dogs, a delayed onset of action and time to maximum effect for regular human insulin was observed. The total bioavailability of the mixture was also slightly decreased compared to separate injections of LANTUS and regular human insulin. The relevance of these observations in dogs to humans is not known.

As with all insulin preparations, the time course of LANTUS action may vary in different individuals or at different times in the same individual and the rate of absorption is dependent on blood supply, temperature, and physical activity.

Insulin may cause sodium retention and edema, particularly if previously poor metabolic control is improved by intensified insulin therapy.

Hypoglycemia

As with all insulin preparations, hypoglycemic reactions may be associated with the administration of LANTUS. Hypoglycemia is the most common adverse effect of insulins. Early warning symptoms of hypoglycemia may be different or less pronounced under certain conditions, such as long duration of diabetes, diabetic nerve disease, use of medications such as beta-blockers, or intensified diabetes control (see PRECAUTIONS, Drug interactions). Such situations may result in severe hypoglycemia (and, possibly, loss of consciousness) prior to patients' awareness of hypoglycemia.

The time of occurrence of hypoglycemia depends on the action profile of the insulins used and may, therefore, change when the treatment regimen is changed. Patients being switched from twice daily NPH insulin to once-daily LANTUS should have their LANTUS dose reduced by 20% from the

previous total daily NPH dose to reduce the risk of hypoglycemia. (See DOSAGE AND ADMINISTRATION: Changeover to LANTUS).

The prolonged effect of subcutaneous LANTUS may delay recovery from hypoglycemia.

In a clinical study, symptoms of hypoglycemia or counterregulatory hormone responses were similar after intravenous insulin glargine and regular human insulin both in healthy subjects and patients with type 1 diabetes.

Renal impairment

Although studies have not been performed in patients with diabetes and renal impairment, LANTUS requirements may be diminished because of reduced insulin metabolism, similar to observations found with other insulins. (See CLINICAL PHARMACOLOGY, Special Populations)

Hepatic impairment

Although studies have not been performed in patients with diabetes and hepatic impairment, LANTUS requirements may be diminished due to reduced capacity for gluconeogenesis and reduced insulin metabolism, similar to observations found with other insulins. (See CLINICAL PHARMACOLOGY, Special Populations)

Injection site and allergic reactions

As with any insulin therapy, lipodystrophy may occur at the injection site and delay insulin absorption. Other injection site reactions with insulin therapy include redness, pain, itching, hives, swelling, and inflammation. Continuous rotation of the injection site within a given area may help to reduce or prevent these reactions. Most minor reactions to insulins usually resolve in a few days to a few weeks.

Reports of injection site pain were more frequent with LANTUS than NPH human insulin (2.7% insulin glargine versus 0.7% NPH). The reports of pain at the injection site were usually mild and did not result in discontinuation of therapy.

Immediate-type allergic reactions are rare. Such reactions to insulin (including insulin glargine) or the excipients may, for example, be associated with generalized skin reactions, angioedema, bronchospasm, hypotension, or shock and may be life threatening.

Intercurrent conditions

Insulin requirements may be altered during intercurrent conditions such as illness, emotional disturbances, or stress.

Information for patients

LANTUS must only be used if the solution is clear and colorless with no particles visible (See DOSAGE and ADMINISTRATION, Preparation and Handling).

Patients must be advised that LANTUS must not be diluted or mixed with any other insulin or solution. (See **PRECAUTIONS: General**)

Patients should be instructed on self-management procedures including glucose monitoring, proper injection technique, and hypoglycemia and hyperglycemia management. Patients must be instructed on handling of special situations such as intercurrent conditions (illness, stress, or emotional disturbances), an inadequate or skipped insulin dose, inadvertent administration of an increased insulin dose, inadequate food intake, or skipped meals. Refer patients to the LANTUS Information for the Patient circular for additional information.

As with all patients who have diabetes, the ability to concentrate and/or react may be impaired as a result of hypoglycemia or hyperglycemia.

Patients with diabetes should be advised to inform their doctor if they are pregnant or are contemplating pregnancy.

Drug interactions

A number of substances affect glucose metabolism and may require insulin dose adjustment and particularly close monitoring.

The following are examples of substances that may increase the blood-glucose-lowering effect and susceptibility to hypoglycemia: oral antidiabetic products, ACE inhibitors, disopyramide, fibrates, fluoxetine, MAO inhibitors, propoxyphene, salicylates, somatostatin analog (e.g., octreotide), sulfonamide antibiotics.

The following are examples of substances that may reduce the blood-glucose-lowering effect of insulin: corticosteroids, danazol, diuretics, sympathomimetic agents (e.g., epinephrine, albuterol, terbutaline), isoniazid, phenothiazine derivatives, somatropin, thyroid hormones, estrogens, progestogens (e.g., in oral contraceptives).

Beta-blockers, clonidine, lithium salts, and alcohol may either potentiate or weaken the blood-glucose-lowering effect of insulin. Pentamidine may cause hypoglycemia, which may sometimes be followed by hyperglycemia.

In addition, under the influence of sympatholytic medicinal products such as beta-blockers, clonidine, guanethidine, and reserpine, the signs of hypoglycemia may be reduced or absent.

Carcinogenesis, mutagenesis, impairment of fertility

In mice and rats, standard two-year carcinogenicity studies with insulin glargine were performed at doses up to 0.455 mg/kg, which is for the rat approximately 10 times and for the mouse approximately 5 times the recommended human subcutaneous starting dose of 10 IU (0.008 mg/kg/day), based on mg/m^2. The findings in female mice were not conclusive due to excessive mortality in all dose groups during the study. Histiocytomas were found at injection sites in male rats (statistically significant) and male mice (not statistically significant) in acid vehicle containing groups. These tumors were not found in female animals, in saline control, or insulin comparator groups using a different vehicle. The relevance of these findings to humans is unknown.

Insulin glargine was not mutagenic in tests for detection of gene mutations in bacteria and mammalian cells (Ames- and HGPRT-test) and in tests for detection of chromosomal aberrations (cytogenetics in vitro in V79 cells and in vivo in Chinese hamsters).

In a combined fertility and prenatal and postnatal study in male and female rats at subcutaneous doses up to 0.36 mg/kg/day, which is approximately 7 times the recommended human subcutaneous starting dose of 10 IU (0.008 mg/kg/day), based on mg/m^2, maternal toxicity due to dose-dependent hypoglycemia, including some deaths, was observed. Consequently, a reduction of the rearing rate occurred in the high-dose group only. Similar effects were observed with NPH human insulin.

Pregnancy

Teratogenic effects: Pregnancy Category C. Subcutaneous reproduction and teratology studies have been performed with insulin glargine and regular human insulin in rats and Himalayan rabbits. The drug was given to female rats before mating, during mating, and throughout pregnancy at doses up to 0.36 mg/kg/day which is approximately 7 times the recommended human subcutaneous starting dose of 10 IU (0.008 mg/kg/day), based on mg/m^2. In rabbits, doses of 0.072 mg/kg/day, which is approximately 2 times the recommended human subcutaneous starting dose of 10 IU (0.008 mg/kg/day), based on mg/m^2, were administered during organogenesis. The effects of insulin glargine did not generally differ from those observed with regular human insulin in rats or rabbits. However, in rabbits, five fetuses from two litters of the high-dose group exhibited dilation of the cerebral ventricles. Fertility and early embryonic development appeared normal.

There are no well-controlled clinical studies of the use of insulin glargine in pregnant women. It is essential for patients with diabetes or a history of gestational diabetes to maintain good metabolic control before conception and throughout pregnancy. Insulin requirements may decrease during the first trimester, generally increase during the second and third trimesters, and rapidly decline after delivery. Careful monitoring of glucose control is essential in such patients. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing mothers

It is unknown whether insulin glargine is excreted in significant amounts in human milk. Many drugs, including human insulin, are excreted in human milk. For this reason, caution should be exercised when LANTUS is administered to a nursing woman. Lactating women may require adjustments in insulin dose and diet.

Pediatric use

Safety and effectiveness of LANTUS have been established in the age group 6 to 15 years with type 1 diabetes.

Geriatric use

In controlled clinical studies comparing insulin glargine to NPH human insulin, 593 of 3890 patients with type 1 and type 2 diabetes were 65 years and older. The only difference in safety or effectiveness in this subpopulation compared to the entire study population was an expected higher incidence of cardiovascular events in both insulin glargine and NPH human insulin-treated patients.

In elderly patients with diabetes, the initial dosing, dose increments, and maintenance dosage should be conservative to avoid hypoglycemic reactions. Hypoglycemia may be difficult to recognize in the elderly (See PRECAUTIONS, Hypoglycemia).

ADVERSE REACTIONS

The adverse events commonly associated with LANTUS include the following:

Body as a whole: allergic reactions (See PRECAUTIONS)

Skin and appendages: injection site reaction, lipodystrophy, pruritus, rash (See PRECAUTIONS)

Other: hypoglycemia (See WARNINGS and PRECAUTIONS)

In clinical studies in adult patients, there was a higher incidence of treatment-emergent injection site pain in LANTUS-treated patients (2.7%) compared to NPH insulin-treated patients (0.7%). The reports of pain at the injection site were usually mild and did not result in discontinuation of therapy. Other treatment-emergent injection site reactions occurred at similar incidences with both insulin glargine and NPH human insulin.

Retinopathy was evaluated in the clinical studies by means of retinal adverse events reported and fundus photography. The numbers of retinal adverse events reported for LANTUS and NPH treatment groups were similar for patients with type 1 and type 2 diabetes. Progression of retinopathy was investigated by fundus photography using a grading protocol derived from the Early Treatment Diabetic Retinopathy Study (ETDRS). In one clinical study involving patients with type 2 diabetes, a difference in the number of subjects with ≥ 3-step progression in ETDRS scale over a 6-month period was noted by fundus photography (7.5% in LANTUS group versus 2.7% in NPH treated group). The overall relevance of this isolated finding cannot be determined due to the small number of patients involved, the short follow-up period, and the fact that this finding was not observed in other clinical studies.

OVERDOSAGE

An excess of insulin relative to food intake, energy expenditure, or both may lead to severe and sometimes long-term and life-threatening hypoglycemia. Mild episodes of hypoglycemia can usually be treated with oral carbohydrates. Adjustments in drug dosage, meal patterns, or exercise may be needed.

More severe episodes with coma, seizure, or neurologic impairment may be treated with intramuscular/subcutaneous glucagon or concentrated intravenous glucose. After apparent clinical recovery from hypoglycemia, continued observation and additional carbohydrate intake may be necessary to avoid reoccurrence of hypoglycemia.

DOSAGE AND ADMINISTRATION

LANTUS is a recombinant human insulin analog. Its potency is approximately the same as human insulin. It exhibits a relatively constant glucose-lowering profile over 24 hours that permits once-daily dosing.

LANTUS should be administered subcutaneously once a day at bedtime. LANTUS is not intended for intravenous administration (See PRECAUTIONS). Intravenous administration of the usual subcutaneous dose could result in severe hypoglycemia. The desired blood glucose levels as well as the doses and timing of antidiabetic medications must be determined individually. Blood glucose

monitoring is recommended for all patients with diabetes. The prolonged duration of activity of LANTUS is dependent on injection into subcutaneous space.

As with all insulins, injection sites within an injection area (abdomen, thigh or deltoid) must be rotated from one injection to the next.

In clinical studies, there was no relevant difference in insulin glargine absorption after abdominal, deltoid, or thigh subcutaneous administration. As for all insulins, the rate of absorption, and consequently the onset and duration of action, may be affected by exercise and other variables.

LANTUS is not the insulin of choice for the treatment of diabetic ketoacidosis. Intravenous short-acting insulin is the preferred treatment.

Pediatric use

LANTUS can be safely administrated to pediatric patients ≥6 years of age. Administration to pediatric patients <6 years has not been studied. Based on the results of a study in pediatric patients, the dose recommendation for changeover to LANTUS is the same as described for adults in DOSAGE AND ADMINISTRATION, Changeover to LANTUS.

Initiation of LANTUS therapy

In a clinical study with insulin naïve patients with type 2 diabetes already treated with oral antidiabetic drugs, LANTUS was started at an average dose of 10 IU once daily, and subsequently adjusted according to the patient's need to a total daily dose ranging from 2 to 100 IU.

Changeover to LANTUS

If changing from a treatment regimen with an intermediate- or long-acting insulin to a regimen with LANTUS, the amount and timing of short-acting insulin or fast-acting insulin analog or the dose of any oral antidiabetic drug may need to be adjusted. In clinical studies, when patients were transferred from once-daily NPH human insulin or ultralente human insulin to once-daily LANTUS, the initial dose was usually not changed. However, when patients were transferred from twice-daily NPH human insulin to LANTUS once daily at bedtime, to reduce the risk of hypoglycemia, the initial dose (IU) was usually reduced by approximately 20% (compared to total daily IU of NPH human insulin) within the first week of treatment and then adjusted based on patient response. (See PRECAUTIONS, Hypoglycemia)

A program of close metabolic monitoring under medical supervision is recommended during transfer and in the initial weeks thereafter. The amount and timing of short-acting insulin or fast-acting insulin analog may need to be adjusted. This is particularly true for patients with acquired antibodies to human insulin needing high-insulin doses and occurs with all insulin analogs. Dose adjustment of LANTUS and other insulins or oral antidiabetic drugs may be required; for example, if the patient's weight or lifestyle changes or other circumstances arise that increase susceptibility to hypoglycemia or hyperglycemia (See PRECAUTIONS, Hypoglycemia).

The dose may also have to be adjusted during intercurrent illness (See PRECAUTIONS, Intercurrent conditions).

Preparation and handling

Parenteral drug products should be inspected visually prior to administration whenever the solution and the container permit. LANTUS must only be used if the solution is clear and colorless with no particles visible.

The syringes must not contain any other medicinal product or residue.

Mixing and diluting. LANTUS must not be diluted or mixed with any other insulin or solution (See PRECAUTIONS: General).

Cartridge version only: If the OptiPen One Insulin Delivery Device malfunctions, LANTUS may be drawn from the cartridge into a U 100 syringe and injected.

HOW SUPPLIED

LANTUS 100 units per mL (U 100) is available in the following package sizes:

5 mL vials (NDC 0088-2220-32)
10 mL vials (NDC 0088-2220-33)
3 mL cartridges*, package of 5 (NDC 0088-2220-52)

*Cartridges are for use only in the OptiPen™ One Insulin Delivery Device

Storage

Unopened LANTUS vials and cartridges should be stored in a refrigerator, 36°F - 46°F (2°C - 8°C). LANTUS should not be stored in the freezer and it should not be allowed to freeze.

If refrigeration is not possible, the 10 mL vial or cartridge of LANTUS in use can be kept unrefrigerated for up to 28 days away from direct heat and light, as long as the temperature is not greater than 86°F (30°C). Unrefrigerated 10 mL vials and cartridges must be used within the 28-day period or they must be discarded.

If refrigeration is not possible, 5 mL vials of LANTUS in use can be kept unrefrigerated for up to 14 days away from direct heat and light, as long as the temperature is not greater than 86°F (30°C). Unrefrigerated 5 mL vials must be used within the 14-day period or they must be discarded. If refrigerated, the 5 mL vial of LANTUS in use can be kept for up to 28 days.

Once the cartridge is placed in an OptiPen One, it should not be put in the refrigerator.

Rx only

Prescribing Information as of April 2000
Manufactured by:
Hoechst Marion Roussel Deutschland GmbH
D-65926 Frankfurt am Main
Germany

Manufactured for:
Aventis Pharmaceuticals Inc.
Kansas City, MO 64137 USA
US Patents 5,656,722, 5,370,629, and 5,509,905
Made in Germany

www.aventispharma-us.com

APPEARS THIS WAY
ON ORIGINAL

LANTUS®

(insulin glargine [Recombinant DNA origin] injection)

Patient Information for the LANTUS Cartridge

This leaflet tells you about LANTUS (LAN-tus) and about how to use the LANTUS cartridge. At the end of the leaflet is a list of vocabulary words you may find useful. Read this information carefully before you use LANTUS. Read the information you get when you refill your LANTUS prescriptions because there may be new information. This leaflet does not take the place of complete discussions with your health care professional. If you have questions about LANTUS or about diabetes, talk with your health care professional.

What is the most important information I should know about LANTUS?

Do not dilute or mix LANTUS with any other insulin or solution. It will not work as intended, and you may lose blood sugar control, which could be serious. Use LANTUS cartridges **only** in the OptiPen One Insulin Delivery Device.

What is LANTUS?

LANTUS is a long-acting synthetic (man-made) human insulin to treat diabetes. You need a prescription to get LANTUS. Always be sure the pharmacy gives you the right insulin. The carton and cartridge should look like the ones in this picture.

(INSERT PICTURE OF CARTON AND CARTRIDGE)

Diabetes is a disease caused when the body cannot produce or use insulin. Insulin is a hormone produced by the pancreas. Your body needs insulin to turn glucose (sugar) from food into energy. If your body does not make enough insulin, you need another source of insulin so you will not have too much sugar in your blood. That is why you must take insulin injections.

LANTUS is similar to the insulin made by your body. It is used once a day to lower blood glucose. Like other insulins, you take LANTUS by injecting it in the fatty layer under the skin (subcutaneously). The dose your heath care professional prescribes helps keep the glucose level in your blood close to normal.

You will be able to tell if LANTUS is working by testing your blood and/or urine for glucose.

LANTUS cartridges contain active and inactive ingredients. The active ingredient is insulin. It is dissolved in a colorless sterile (germ-free) fluid. The concentration is 100 units/mL (U-100). Inactive ingredients are zinc, glycerol, m-cresol, and water for injection.

LANTUS cartridges **must** be used only with the OptiPen One Insulin Delivery Device. If you try to use any other insulin pen, you could get a wrong dose.

Insulin injections play an important role in keeping your diabetes in control. But the way you live – your diet, careful monitoring of your glucose levels, exercise, and planned physical activity – all work with your insulin to help you control your diabetes.

Who should not take LANTUS?

You should not take LANTUS if you are allergic to insulin or any of the inactive ingredients in LANTUS.

How should I take LANTUS?

Inject LANTUS under your skin once a day at bedtime. You do not need to shake the cartridge before use. You should look at the medicine in the cartridge. If the medicine is cloudy or has particles in it, throw the cartridge away and get a new one.

How do I load the LANTUS cartridge into the OptiPen One Insulin Delivery Device?

Do not dilute or mix LANTUS with any other insulin or solution.

Follow these steps:

1. Find the instructions that came with the OptiPen One device.
2. Wash your hands. Always do this before handling the cartridge.
3. Check the insulin solution in the cartridge to make sure it is clear, colorless, and free of particles. If it is not, throw it away.
4. Follow the step-by-step instructions for loading the cartridge that came with the OptiPen One device. If you have lost your instructions or have a question, call 1-XXX-XXX-XXXX.

How do I inject LANTUS?

Do not mix or dilute LANTUS with any other insulin or solution or LANTUS will not work as intended, and you may lose blood sugar control, which could be serious. You do not have to shake the cartridge before use.

Follow these steps:

1. Find the instructions that came with the OptiPen One device.
2. Wash your hands. Always do this before handling the cartridge.
3. Check the insulin solution in the cartridge to make sure it is clear, colorless and free of particles. If it is not, throw it away and get a new one.
4. Remove the protective cap on the OptiPen One device.
5. Follow the OptiPen One instructions for attaching the needle.
6. Check for air bubbles in the cartridge. If you see any, follow the OptiPen One instructions for removing them.
7. Set the OptiPen One to the correct dose. The instructions also explain how to do that.
8. Decide on an injection area—either upper arm, thigh, or abdomen. Do not use the same injection site as your last injection.
9. Use alcohol to clean the skin where you are going to inject.
10. Pinch the skin with one hand and hold it. Stick the needle into the skin the way your health care professional showed you.
11. To inject LANTUS, follow the instructions that came with the OptiPen One device.
12. After injecting LANTUS, leave the needle in then skin for several seconds. Then pull the needle straight out. Gently press on the spot where you injected yourself for a few seconds. **Do not rub the area.**
13. Follow the OptiPen One device instructions about how to remove and throw away the needle. Do not reuse the needle.

If your blood glucose reading is high or low, or if your urine tests show glucose, tell your health care professional so the dose can be adjusted.

What can affect how much insulin I need?

Illness. Illness may change how much insulin you need. It is a good idea to think ahead and make a "sick day" plan with your health care professional so you will be ready when this happens. Be sure to test your blood and urine often and call your health care professional if you are sick.

Pregnancy and nursing. If you are pregnant or nursing, or if you plan to get pregnant, talk with your health care professional before you take LANTUS. Your diabetes may be harder to control when you are pregnant. It is important for you to monitor your glucose closer than usual during this time.

Medicines. Other medicines can change the way insulin works. Therefore, tell your health care professional about all other medicines you are taking. Your insulin dosage may need to be changed by your health care professional. Do not change your medicine doses yourself.

For example, your body may need more insulin if you take birth control, thyroid, decongestant, or diet pills. Your body may need less insulin if you are taking antidepressants, antidiabetic pills, or ACE inhibitors (used to lower blood pressure and for certain heart conditions).

Exercise. Exercise may change the way your body uses insulin. Be sure to check with your health care professional before you start an exercise program.

Travel. If you travel across time zones, talk with your health care professional about how to time your injections. When you travel, wear your medical alert identification. Take extra insulin and supplies with you.

What if I want to drink alcohol?

Before you drink alcohol, talk to your health care professional about its effect on diabetes.

What are the possible side effects of insulins?

1. Allergic reactions:

In rare cases, a patient may be allergic to an insulin product. Severe insulin allergies may be life-threatening. If you think you are having an allergic reaction, get medical help right away. Signs of insulin allergy are

- a rash all over your body
- shortness of breath
- wheezing (trouble breathing)
- a fast pulse
- sweating
- low blood pressure

2. Hypoglycemia:

Hypoglycemia is often called an "insulin reaction" or "low blood sugar." It may occur when you do not have enough glucose in your blood. Common causes of hypoglycemia are illness, emotional or physical stress, too much insulin, too little food or missed meals, and too much exercise.

Some of the symptoms of hypoglycemia are

- sudden cold sweat
- feeling shaky or nervous
- feeling very tired
- feeling sick to your stomach
- feeling dizzy

- blurry vision
- headache
- confusion
- personality changes

Early warning signs of hypoglycemia may be different or less noticeable in some people. That is why it is important to check your glucose as you have been advised by your doctor.

If you have hypoglycemia, your body needs sugar. That is why you should carry sugar, candy mints, or glucose tablets with you. Learn to recognize the signs and eat or drink something that has some sugar in it.

Hypoglycemia can be very dangerous. Severe hypoglycemia can cause confusion, seizures, and loss of consciousness. Someone with hypoglycemia who cannot take sugar by mouth needs medical help fast. Without immediate medical help, serious reactions or even death could occur.

You will have mild hypoglycemia once in a while when a meal is delayed, if you get sick, or if you are late with your insulin injection. But if hypoglycemia happens often or is severe, tell your health care professional about it. Also, if you have trouble recognizing the symptoms of hypoglycemia, talk with your health care professional.

3. **Hyperglycemia:**

Hyperglycemia occurs when you have too much glucose in your blood. Usually, it means there is not enough insulin to break down the food you eat into energy your body can use. Hyperglycemia can be caused by a fever, an infection, stress, eating more than you should, taking less insulin than prescribed, or it can be part of the natural progression of diabetes.

Routine testing of your blood or urine will let you know if you have hyperglycemia. If your tests are often high, tell your health care professional so your dose of medicine can be changed.

If your glucose is often high, you can develop a very serious condition called diabetic ketoacidosis. Ketoacidosis can be life-threatening. If your blood tests show high amounts of glucose or your urine tests show high amounts of glucose or acetone, or if you have signs of ketoacidosis, you need to get medical help quickly. **Do not use LANTUS to treat diabetic ketoacidosis.** Signs of ketoacidosis are:

- sleepiness
- flushed (red) face
- thirst
- loss of appetite

- fruity odor on your breath

Signs of **severe** ketoacidosis are:
- heavy breathing
- fast pulse

4. Possible reactions on the skin at the injection site:

Injecting insulin can cause the following reactions on the skin at the injection site:
- a little depression in the skin (lipoatrophy)
- skin thickening (lipohypertrophy)
- red, swelling, itchy skin (injection site reaction).

An injection site reaction should clear up in a few days or a few weeks. If it does not go away and it continues to occur, tell your health care professional.

You can reduce the chance of getting lipoatrophy and lipohypertrophy if you change the injection site each time. Tell you health care professional if you have these problems. You may need to learn to inject your insulin a different way.

How should I store LANTUS?

Store new LANTUS cartridges in the refrigerator (not the freezer) between 36°F - 46°F (2°C - 8°C). Do not freeze LANTUS. If a cartridge freezes, throw it away.

Once a cartridge is in the OptiPen device, it should not be refrigerated, but should be kept as cool as possible (below 86°F [30°C]). It is good for 28 days. Keep LANTUS out of direct heat and light. For example, do not leave the OptiPen device in your car on a summer day.

VOCABULARY

Glucose – A form of sugar that the body uses for fuel. It is made when food is broken down in the digestive system. Blood carries glucose to the cells.

Hypoglycemia – Also called insulin reaction. It means that glucose levels in the blood are too low.

Hyperglycemia – Too much glucose in the blood. Usually testing, not symptoms, reveals a too-high level.

Insulin – A hormone that helps the cells in your body use glucose.

LANTUS – A long-acting insulin similar to insulin made by your body. It is used once a day at bedtime to lower blood glucose.

Lipoatrophy (LIP-o-AT-troe-fee) – Loss of fat under the skin. Can be caused by repeated insulin injections in the same place.

Lipohypertrophy (LIP-o-hi-PER-troe-fee) – A lump under the skin caused by an overgrowth of fat cells. Can be caused by repeated insulin injections in the same place.

Ketoacidosis (kee-toe-as-ih-DOE-sis) – A dangerous condition caused when the body does not have enough insulin.

Pancreas (PAN-kree-as) – A gland near the stomach that produces insulin.

Subcutaneous (sub-ku- TAE-nee-us) – The fatty layer under the skin.

ADDITIONAL INFORMATION

DIABETES FORECAST is a national magazine designed especially for patients with diabetes and their families and is available by subscription from the American Diabetes Association, National Service Center, 1701 N. Beauregard Street, Alexandria, Virginia 22311, 1-800-DIABETES (1-800-342-2383).

Another publication, **DIABETES COUNTDOWN**, is available from the Juvenile Diabetes Foundation International (JDF), 120 Wall Street, 19th Floor, New York, New York 10005, 1-800-JDF-CURE (1-800-533-2873). You may also visit the JDF website at www.jdf.org.

To get more information about diabetes, check with your doctor or diabetes educator. To get more information about LANTUS, ask your health care professional or call X-XXX-XXX-XXXX.

April 2000

Package insert circular number: 50052781

Aventis Pharmaceuticals Inc.
Kansas City, MO 64137 USA

LANTUS®

(insulin glargine [Recombinant DNA origin] injection)

Patient Information for the LANTUS Vial

This leaflet tells you about LANTUS (LAN-tus) and about how to use LANTUS in a vial. At the end of the leaflet is a list of vocabulary words you may find useful. Read this information carefully before you use LANTUS. Read the information you get when you refill your LANTUS prescriptions because there may be new information. This leaflet does not take the place of complete discussions with your health care professional. If you have questions about LANTUS or about diabetes, talk with your health care professional.

What is the most important information I should know about LANTUS?

Do not dilute or mix LANTUS with any other insulin or solution. It will not work as intended, and you may lose blood sugar control, which could be serious.

What is LANTUS?

LANTUS is a long-acting synthetic (man-made) human insulin to treat diabetes. You need a prescription to get LANTUS. Always be sure the pharmacy gives you the right insulin. The carton and vial should look like the ones in this picture.

(INSERT PICTURE OF CARTON AND VIAL)

Diabetes is a disease caused when the body cannot produce or use insulin. Insulin is a hormone produced by the pancreas. Your body needs insulin to turn glucose (sugar) from food into energy. If your body does not make enough insulin, you need another source of insulin so you will not have too much sugar in your blood. That is why you must take insulin injections.

LANTUS is similar to the insulin made by your body. It is used once a day to lower blood glucose. Like other insulins, you take LANTUS by injecting it in the fatty layer under the skin (subcutaneously). The dose your heath care professional prescribes helps keep the glucose level in your blood close to normal.

You will be able to tell if LANTUS is working by testing your blood and/or urine for glucose.

LANTUS contains active and inactive ingredients. The active ingredient is insulin. It is dissolved in a colorless sterile (germ-free) fluid. The concentration is 100 units/mL (U-100). Inactive ingredients are zinc, glycerol, m-cresol, and water for injection.

Insulin injections play an important role in keeping your diabetes in control. But the way you live – your diet, careful monitoring of your glucose levels, exercise, and planned physical activity – all work with your insulin to help you control your diabetes.

Who should not take LANTUS?

You should not take LANTUS if you are allergic to insulin or any of the inactive ingredients in LANTUS.

How should I take LANTUS?

Inject LANTUS under your skin once a day at bedtime. You do not need to shake the vial before use. You should look at the medicine in the vial. If the medicine is cloudy or has particles in it, throw the vial away and get a new one.

What sort of syringe should I use?

Always use a syringe that is marked for U-100 insulin preparations. If you use the wrong syringe, you may get the wrong dose and develop a blood glucose level that is too low or too high.

Use disposable syringes and needles only once. Throw them away properly. Use a new needle and syringe every time you dose. **Never** share needles and syringes.

How do I draw the insulin into the syringe?

Do not dilute or mix LANTUS with any other insulin or solution. The syringe must not contain any other medicine or residue.

Follow these steps:

1. Wash your hands.
2. Check the insulin to make sure it is clear and colorless. Do not use it if it is cloudy or if you see particles.
3. If you are using a new vial, remove the protective cap. **Do not** remove the stopper.
4. Wipe the top of the vial with an alcohol swab.
5. Draw air into the syringe equal to your insulin dose. Put the needle through the rubber top of the vial and push the plunger to inject the air into the vial.
6. Leave the syringe in the vial and turn both upside down. Hold the syringe and vial firmly in one hand.
7. Make sure the tip of the needle is in the insulin. With your free hand, pull the plunger to withdraw the correct dose into the syringe.
8. Before you take the needle out of the vial, check the syringe for air bubbles. If bubbles are in the medicine, hold the syringe straight up and tap the side of

the syringe until the bubbles float to the top. Push the bubbles out with the plunger and draw insulin back in until you have the correct dose.

9. Remove the needle from the vial. Do not let the needle touch anything. You are now ready to inject.

How do I inject LANTUS?

Do not mix or dilute LANTUS with any other insulin or solution or LANTUS will not work as intended, and you may lose blood sugar control, which could be serious. You do not have to shake the vial before use.

Follow these steps:

1. Decide on an injection area—either upper arm, thigh, or abdomen. Injection sites within an injection area must be different from one injection to the next.
2. Use alcohol to clean the skin where you are going to inject.
3. Pinch the skin and hold it. Stick the needle in the way your doctor, nurse, or diabetes educator showed you.
4. Slowly push in the plunger of the syringe all the way, making sure you have injected all the insulin. Leave the needle in the skin for several seconds.
5. Pull the needle straight out and gently press on the spot where you injected yourself for several seconds. **Do not rub the area.**
6. Follow your health care professional's instructions for throwing away the needle and syringe.

If your blood glucose reading is high or low, or if your urine tests show glucose, tell your health care professional so the dose can be adjusted.

What can affect how much insulin I need?

Illness. Illness may change how much insulin you need. It is a good idea to think ahead and make a "sick day" plan with your health care professional so you will be ready when this happens. Be sure to test your blood and urine often and call your health care professional if you are sick.

Pregnancy and nursing. If you are pregnant or nursing, or if you plan to get pregnant, talk with your health care professional before you take LANTUS. Your diabetes may be harder to control when you are pregnant. It is important for you to monitor your glucose closer than usual during this time.

Medicines. Other medicines can change the way insulin works. Therefore, tell your health care professional about all other medicines you are taking. Your insulin dosage may need to be changed by your health care professional. Do not change your medicine doses yourself.

For example, your body may need more insulin if you take birth control, thyroid, decongestant, or diet pills. Your body may need less insulin if you are taking

antidepressants, antidiabetic pills, or ACE inhibitors (used to lower blood pressure and for certain heart conditions.

Exercise. Exercise may change the way your body uses insulin. Be sure to check with your health care professional before you start an exercise program.

Travel. If you travel across time zones, talk with your health care professional about how to time your injections. When you travel, wear your medical alert identification. Take extra insulin and supplies with you.

What if I want to drink alcohol?

Before you drink alcohol, talk to your health care professional about its effect on diabetes.

What are the possible side effects of insulins?

1. Allergic reactions:

In rare cases, a patient may be allergic to an insulin product. Severe insulin allergies may be life-threatening. If you think you are having an allergic reaction, get medical help right away. Signs of insulin allergy are

- a rash all over your body
- shortness of breath
- wheezing (trouble breathing)
- a fast pulse
- sweating
- low blood pressure

2. Hypoglycemia:

Hypoglycemia is often called an "insulin reaction" or "low blood sugar." It may occur when you do not have enough glucose in your blood. Common causes of hypoglycemia are illness, emotional or physical stress, too much insulin, too little food or missed meals, and too much exercise.

Some of the symptoms of hypoglycemia are

- sudden cold sweat
- feeling shaky or nervous
- feeling very tired
- feeling sick to your stomach
- feeling dizzy
- blurry vision

- headache
- confusion
- personality changes

Early warning signs of hypoglycemia may be different or less noticeable in some people. That is why it is important to check your glucose as you have been advised by your doctor.

If you have hypoglycemia, your body needs sugar. That is why you should carry sugar, candy mints, or glucose tablets with you. Learn to recognize the signs and eat or drink something that has some sugar in it.

Hypoglycemia can be very dangerous. Severe hypoglycemia can cause confusion, seizures, and loss of consciousness. Someone with hypoglycemia who cannot take sugar by mouth needs medical help fast. Without immediate medical help, serious reactions or even death could occur.

You will have mild hypoglycemia once in a while when a meal is delayed, if you get sick, or if you are late with your insulin injection. But if hypoglycemia happens often or is severe, tell your health care professional about it. Also, if you have trouble recognizing the symptoms of hypoglycemia, talk with your health care professional.

3. Hyperglycemia:

Hyperglycemia occurs when you have too much glucose in your blood. Usually, it means there is not enough insulin to break down the food you eat into energy your body can use. Hyperglycemia can be caused by a fever, an infection, stress, eating more than you should, taking less insulin than prescribed, or it can be part of the natural progression of diabetes.

Routine testing of your blood or urine will let you know if you have hyperglycemia. If your tests are often high, tell your health care professional so your dose of medicine can be changed.

If your glucose is often high, you can develop a very serious condition called diabetic ketoacidosis. Ketoacidosis can be life-threatening. If your blood tests show high amounts of glucose or your urine tests show high amounts of glucose or acetone, or if you have signs of ketoacidosis, you need to get medical help quickly. **Do not use LANTUS to treat diabetic ketoacidosis.** Signs of ketoacidosis are:

- sleepiness
- flushed (red) face
- thirst
- loss of appetite
- fruity odor on your breath

Signs of **severe** ketoacidosis are:

- heavy breathing
- fast pulse

4. Possible reactions on the skin at the injection site:

Injecting insulin can cause the following reactions on the skin at the injection site:

- a little depression in the skin (lipoatrophy)
- skin thickening (lipohypertrophy)
- red, swelling, itchy skin (injection site reaction).

An injection site reaction should clear up in a few days or a few weeks. If it does not go away and it continues to occur, tell your health care professional.

You can reduce the chance of getting lipoatrophy and lipohypertrophy if you change the injection site each time. Tell you health care professional if you have these problems. You may need to learn to inject your insulin a different way.

How should I store LANTUS?

Store new LANTUS vials in the refrigerator (not the freezer) between 36°F - 46°F (2°C - 8°C). Do not freeze LANTUS. If a vial freezes, throw it away.

Once a vial is opened, you can keep it in the refrigerator or as cool as possible (below 86°F [30°C]). The 10 mL vial is good for 28 days. The 5 mL vial is good for 14 days if stored in a cool place (below 86°F [30°C]) or 28 days if refrigerated. Keep LANTUS out of direct heat and light. For example, do not leave it in your car on a summer day.

VOCABULARY

Glucose – A form of sugar that the body uses for fuel. It is made when food is broken down in the digestive system. Blood carries glucose to the cells.

Hypoglycemia – Also called insulin reaction. It means that glucose levels in the blood are too low.

Hyperglycemia – Too much glucose in the blood. Usually testing, not symptoms, reveals a too-high level.

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Aventis Pharmaceuticals Inc.
Kansas City, MO 64137 USA